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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,490

09/26/2006

Hartmut Hillmer

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EXAMINER

CHERRY, EUNCHA P

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

08/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,490	<b>Applicant(s)</b> HILLMER ET AL.	
	<b>Examiner</b> EUNCHA P. CHERRY	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 3/9/09, 5/13/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 25-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 25-46, 49 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosa et al (US 6,632,373 B1 from IDS).

Rosa et al discloses an apparatus with mirror elements for large-area light deflection, characterized in that: the apparatus forms a panel (Fig. 2a, 104, 105) which has a plurality of micromirror apparatuses (106, 107), which themselves contain a respective plurality of individual bodies which are connected to a common base mounting surface (Fig. 5, 499), with one individual body containing at least one holding element (see Fig. 5, 450), which is upright above the base mounting surface (see 450 is raised), for a mirror element which is connected to it and has an optically reflective effect, and with a conductive layer (410) being provided as a common control electrode for common movement (relative to the mirror support) of a group of mirror elements, in which an electrically controllable actuation mechanism is provided for the movement of

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the mirror elements, a device for application of a plurality of electrical control variables to respectively different, predetermined groups of spatially adjacent mirror elements, in order to drive the actuation mechanism (column 4, lines 29-58), in which the device for application of a plurality of electrical control variables for the purpose of specific actuation of mirror elements contains a device for wire-free reception of a plurality of different control signals from a controller (actuation force in 410), in which the plurality of micromirror apparatuses are subdivided into individual modules which can each individually be connected to one another (as shown in Fig. 2a), in which the mirror elements are in the form of a reflective metal layer or a dielectric multiple layer with an electrically conductive single layer or are in the form of a reflective polymer layer with a conductive single layer (column 4, lines 59-67), in which the apparatus contains connecting elements, to which individual modules of the same type can be connected at the edge (see Fig. 5), in which the apparatus contains plug-in connecting elements and in which the connecting elements contain not only the mechanical connection but also an electrical plug-in connection between apparatuses of the same type (AC drive or DC drive), in which the predetermined electrical control variable can be predetermined for each

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micromirror apparatus, in which the mirror elements are either designed to be fiat or they have a curved shape (flat), in which a holding element and a mirror element are manufactured from one piece (see Fig. 5), in which the mirror elements are rectangular (see Fig. 7g). in which the mirror elements are arranged in the form of a regular matrix comprising parallel rows and parallel columns (see Fig. 7g), in which a mirror element is in the form of a structural element of a metal layer or of a dielectric multiple layer with a conductive single layer, or of a conductive polymer layer with reflective characteristics, and in which the mirror element is mounted such that it can move relative to the base mounting surface, for an actuation mechanism which acts on the mirror element, by virtue of its own predetermined bending stiffness or the bending stiffness of its connection to the holding element (column 4, lines 59-67), in which is common to a plurality of or all of the mirror elements, is provided on the base mounting surface and an electrical supply line, which leads to an outer edge of the apparatus, and contact between the electrodes and groups of individual bodies is provided by means of planar lines, for computer-controlled addressing and actuation of the individual-body movement, in groups, via the electrode pairs.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 47, 48 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosa et al.

Rosa et al discloses the claimed invention as set forth above except for the apparatus as claimed is in used for building window. It would have been obvious to one of ordinary skill in the art to use the claimed apparatus in building of window in order to create high quality deflection for advertisements.

***Response to Arguments***

5. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that the prior art does not disclose a common control electrode to produce at least common movement of a group of mirror elements. Examiner disagrees. The group of mirror elements is moving relative to the mirror support that holds the individual mirrors, which

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satisfies the amended languages. It appears that the rejection is deemed proper.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miller et al (US 2002/0171327A1) discloses an apparatus that satisfying claim 25.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P.

CHERRY whose telephone number is 571-272-2310. The examiner can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EUNCHA P. CHERRY/  
Primary Examiner  
Art Unit 2872

8/3/09